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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,978	03/26/2004	Yao-Hwan Kao	N1085-00220	9632
8933	7590	06/17/2005	[TSMC2003-030]	
DUANE MORRIS, LLP IP DEPARTMENT ONE LIBERTY PLACE PHILADELPHIA, PA 19103-7396			EXAMINER FUQUA, SHAWN TINA T	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,978

Applicant(s)

KAO ET AL.

Examiner

Shawntina T. Fuqua

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Nomatsu (US6554507).

Nomatsu discloses a method for controlling a thickness of a photo resist layer comprising the steps of providing a manufacturing recipe of the resist with an exhaust flow value, controlling the exhaust flow while the resist is heated to a solidified layer of a controlled thickness and surface profile, and varying the exhaust flow with a control valve (column 6, lines 21-28, 34-38, 50-61, column 7, lines 19-67, column 8, lines 1-13, 57-60, 64-67, column 9, lines 4-45).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-5, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirakawa et al (US6380518).

Shirakawa et al discloses an apparatus for adjusting exhaust flow in a hot plate comprising a programmable exhaust control regulator generating a first input signal (column 9, lines 9-15), an exhaust flow meter (column 8, lines 48-53) generating a second input signal (column 10, lines 60-67), and a control valve moved to different positions according the first and second input signals (95, column 10, lines 64-67), the regulator has a high exhaust flow to clean particles (column 11, lines 1-12), the exhaust portion being an exhaust conduit communicating with a manifold of a central exhaust conduit (66c, Figure 6).

Shirakawa et al discloses all of the claimed invention except for controlling valve with a motor which is driven by a motor drive circuit, a second hot plate and exhaust system including an exhaust conduit, flow control valve, and flow meter. Controlling a valve with a motor driven by a motor control circuit is conventional and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a motor and drive motor circuit as a more efficient means to open and close the valve. In addition, it would have been obvious to include a second hot plate and exhaust system as a means to increase throughput and would be recognized as being within the level of ordinary skill in the art.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomatsu. Nomatsu discloses all of the recited subject matter as cited above in paragraph 2 except controlling valve with a motor which is driven by a motor drive circuit. Controlling a valve with a motor driven by a motor control circuit is conventional and well known in the art. It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to have included a motor and drive motor circuit as a more efficient means to open and close the valve.

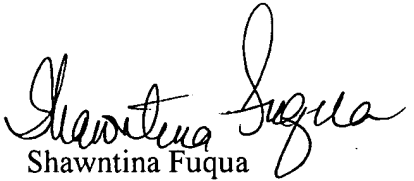
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (571) 272-4779. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf
May 6, 2005


Shawntina Fuqua
Patent Examiner
Art Unit 3742